

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

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TITLE : PRODUCTION OF GAMMA-GLUTAMYL-CYSTEINE

ABSTRACT : PURPOSE: The culture mixture, cell bodies or their treated products of a specific microorganism capable of regenerating adenosine triphosphate is used to produce  $\gamma$ -glutamylcystein with industrial advantage.

CONSTITUTION: The culture mixture, cell bodies, or their treated products of a microorganism which is capable of producing  $\gamma$ -glutamylcystein from glutamic acid and cysteine and/or cystine in the presence of ATP, of converting ADP into ATP with an energy donor other than phosphorylation agents, further of developing both ability simultaneously in conjugation, e.g., Escherichia coli K12 (ATCC 10798) is brought into contact with an aqueous medium containing L-glutamic acid, L-cysteine and/or L-cystine, an energy donor other than phosphorylation agent and, when needed, a surface active agent and an organic solvent.

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